



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/765,281

01/28/2004

Osamu Iwasaki

Q79584

7585

23373

7590

05/15/2006

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

LEE, JOHN D

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,281

Applicant(s)

IWASAKI ET AL.

Examiner

John D. Lee

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,5,13-15 and 19 is/are rejected.
- 7) ☒ Claim(s) 2-4,6-12,16-18 and 20-22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0104,0804,0205.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

The thirty-eight (38) sheets of drawing filed in this application on January 28, 2004, are acceptable.

The disclosure is objected to because of the following minor informalities: in the numbering of equations throughout the specification, it appears that equations "(12)" and "(30)" have been omitted. Appropriate clarification and/or correction is required. Applicant's cooperation is requested in correcting any other errors of which applicant may become aware in the specification.

Claims 9-12 are objected to because of the following minor informalities: in line 2 of each of these claims, the word "exciting" should actually be "exiting". Appropriate correction is required.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR § 1.321(c) or § 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR § 3.73(b).

Claims 1, 5, 13-15, and 19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 4, 6, and 10 of U.S. Patent No. 6,907,177. Although the conflicting claims are not identical, they are not patentably distinct from each other because the only essential difference is the recitation (in the claims of the instant application) of a "communication system" and an "optical receiver". These broadly recited components, however, do not actually form a part of the structure that is being claimed, as there are not enough discernable claimed elements to form an entire "communication system" and there are no details whatsoever concerning any "optical receiver". The claims basically, then, just recite that the sheet-type optical conductor is a part of a "communication system" which includes an "optical receiver" at one end of the conductor. There is thus no patentable distinction between the device of claims 1, 5, 13-15, and 19 herein and the device of claims 2, 4, 6, and 10 of U.S. Patent No. 6,907,177. Moreover, a generic "communication system" and a generic "optical receiver" represent components that are inherently present in the device of claims 2, 4, 6, and 10 of U.S. Patent No. 6,907,177. The limitations of claims 15 and 19 of the instant application are not recited in the claims of U.S. Patent No. 6,907,177, but such limitations do not represent patentable distinctions, as they would have been obvious in the device of claims 2, 4, 6, and 10 of U.S. Patent No. 6,907,177. The inclusion of a low-index cladding layer and a protective layer are so ubiquitous in the sheet-type waveguide optical art that a person of ordinary skill would have naturally found it obvious to include them on the waveguide structure set forth in claims 2, 4, 6, and 10 of U.S. Patent No. 6,907,177.

Claims 2-4, 6-12, 16-18, and 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The limitations of these claims are not included in (and would not have been obvious for inclusion in) the claims of U.S. Patent No. 6,907,177.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents 5,993,020 to Koike and 6,412,968 to Ohkawa show sheet-type optical waveguides which include light scattering particles. These two references, however, do not disclose or suggest applicant's unique claimed relationship of $\Phi \cdot N_p \cdot L_G \cdot K_C \leq 0.9$. The five (5) U.S. Patent Application Publications listed on the attached **Notice of References Cited**, form PTO-892, as documents D-H are commonly owned with the present application, and claim subject matter very similar to the subject matter claimed herein. Although no double patenting rejections were set forth herein relating to these five (5) documents (since those documents were all filed later than the instant application), the potential for double patenting still exists therebetween. Applicant is therefore cautioned to maintain a clear line of demarcation between the claims of all the presently pending applications.

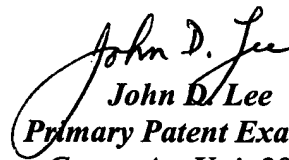
All of the prior art documents cited by applicant in the Information Disclosure Statements filed on January 28, 2004; August 16, 2004; and February 9, 2005, have been considered and made of record. Note the attached copy of forms PTO-1449.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the Examiner presumes that the subject matter of

Art Unit: 2874

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. §§ 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

Any inquiry concerning the merits of this communication should be directed to Examiner John D. Lee at telephone number (571) 272-2351. The Examiner's normal work schedule is Tuesday through Friday, 6:30 AM to 5:00 PM. Any inquiry of a general or clerical nature (i.e. a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562, to the technical support staff supervisor (Team 8) at telephone number (571) 272-1564, or to the Technology Center 2800 Customer Service Office at telephone number (571) 272-1626.


John D. Lee
Primary Patent Examiner
Group Art Unit 2874